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Leo Szilard Dies; A-Bomb Physicist

By The Associated Press

LA JOLLA, Calif., May 30—

Dr. Leo Szilard, one of the world's leading nuclear physicists, died today at his home here, apparently of a heart attack. He was 66 years old.

Dr. Szilard was one of the men who helped convince Dr. Albert Einstein in 1939 that he should talk to President Franklin D. Roosevelt about atomic weapons. Einstein wrote the President, and the United States began development of an atomic bomb.

In 1942, Dr. Szilard and Dr. Enrico Fermi created the first chain reaction in a laboratory of the University of Chicago.

The physicist, who later became a molecular biologist and a tireless campaigner in the

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Associated Press

Dr. Leo Szilard

There, on Dec. 2, 1942, the atomic bomb was made possible by man's first sustained nuclear chain reaction. This was brought about in an atomic pile composed of uranium and graphite, under the now demolished west stands of Stagg Field. The system was also used in the manufacture of plutonium at Hanford, Wash.

Dr. Szilard later told a Congressional committee that the United States would have had the atomic bomb 18 months sooner than it did except for military restrictions on free scientific research. He said the scientists had to break security regulations to produce the bomb as soon as they did.

In March, 1945, five months before atomic bombs were dropped on Hiroshima and Nagasaki, Dr. Szilard and other atomic scientists began working for international control of atomic energy. After the bombs dropped he redoubled these efforts.

He helped to organize the Emergency Committee of Atomic Scientists. In the February, 1960, issue of The Bulletin of the Atomic Scientists, he published an article predicting a power stalemate between the United States and the Soviet Union. Dr. Szilard proposed that they adopt a mutual security system, keeping their bombs and rockets but imposing restraints to prevent all-out war. This was feasible, he said, because each would have one overriding interest in common—the desire to live with the bomb without fear of mutual annihilation.

Dr. Szilard joined the faculty of the University of Chicago in 1946 as a professor of biophysics. He went on leave in 1955 to work on a public-health grant in New York.

On April 5, 1960, Dr. Szilard and Dr. Eugene Wigner received 1959 Atoms for Peace awards for their part in the development of nuclear reactors.

Dr. Szilard and Dr. Fermi had received a patent in 1955 for the first nuclear reactor or atomic pile.

LEO SZILARD DIES; A-BOMB PHYSICIST

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search for peace, came here last month from Chicago to join the Salk Institute for Biological Studies.

He is survived by his widow, Dr. Gertrud Weiss Szilard, a physician formerly with the University of Colorado Medical School, whom he married in 1951.

Fled From Nazis

After coming to the United States as a refugee from Nazi Germany, Dr. Szilard helped to develop the atomic bomb that could have won the war for Hitler.

Dr. Szilard—whose name was pronounced ZIL-ard—played a leading part in convincing the Government of the military importance of nuclear energy.

After the bombs he had helped to produce were dropped on Hiroshima and Nagasaki, ending the war with Japan, Dr. Szilard devoted the rest of his life to promoting peaceful uses of nuclear power. He urged the need of international control and agreement between the United States and the Soviet Union to prevent the destruction of mankind in a nuclear war.

Dr. Szilard was born in Budapest on Feb. 11, 1898. He was the son of a construction engineer and first studied engineering but later shifted to theoretical physics.

After receiving a Ph.D. degree from the University of Berlin in 1922, he was appointed an assistant at the university's Institute of Theoretical Physics. For the next 10 years, he did research at the university's laboratories and the Kaiser Wilhelm Institute.

When Hitler came to power in 1933, Dr. Szilard left for Vienna and later that year for London. He began his work in nuclear physics in 1934 on the staff of the physics department at St. Bartholomew's Hospital in London. There he evolved a new principle of isotopic separation of artificially radioactive elements.

Research At Oxford

He continued his research in nuclear physics at the Clarendon laboratory of Oxford University from 1935 to 1938, when he left for the United States. He later became an American citizen and explained he had left Britain because he believed it had betrayed Czechoslovakia in the Munich pact with Hitler.

Dr. Szilard and Dr. Walter H. Zinn, working as research guests in the Pupin Building at Columbia University on March 3, 1939, performed an experiment that indicated that neutrons were emitted in the fission of uranium. That meant that the liberation of atomic energy was in sight.

Telling how they had watched a television screen for flashes of light that would signify the success of the experiment, Dr. Szilard wrote:

"We turned the switch, we saw the flashes, we watched them for about 10 minutes—and then we switched everything off and went home. That night I knew the world was headed for sorrow."

In 1939, Dr. Szilard helped impress the significance of atomic energy on President Roosevelt. He took part in drafting a letter signed by Einstein, urging research on the development of an atomic bomb. The first contract for this project was let to Columbia University in 1940 for a project headed by Dr. Szilard and Dr. Fermi.

Early in 1942, the Szilard-Fermi team was transferred to the University of Chicago.

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